

The Format

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1 The Skill Circle

To survive in a bargaining society you have to be a smart negotiator capable of maximizing your short-term benefits (get good grades for your exams and assignments). But academia as a learning environment can be so much more. To move beyond a mere survival strategy you have to work on and master a set of basic skills at a sufficiently high level. These skills can be identified by a Skill circle that can be depicted by two overlapping scales (Figure 1). First along a *social scale* skills can be positioned from purely individual to group skills. Secondly, skills have a *process scale* that runs from input oriented to output oriented skills. This basic distinction results in seven relevant basic skills: research and analytical skills, study and self-management skills, reading, listening, writing, presentation and team and project management skills.



Figure 1 The Skill Circle

At university you are often supported and challenged to develop all these skills *simultaneously*. But the degree to which you develop and master these beyond the

minimum (calculating) level largely depends on your own efforts. At most universities, for instance, presentation skills and project/team management skills are fostered much less than listening skills (in big classes) or reading skills (large amounts of literature for a written multiple-choice exam). Project management in teams – even at universities that have adopted small study groups – often comes down to a fixed division of labour between study friends who team up repeatedly. Experience shows that this type of division of labour is not conducive to individuals correcting the deficiencies in their skill circle. Many a student realizes only during the thesis-writing period – when you cannot fall back on a team – what kind of skills they never practised. This explains why a considerable number of students do not finish their studies despite only having their thesis left to write – in other words, with 95% of all course work already completed at a ‘sufficient’ level. It also explains why some tutors always complain that students are not ‘ready’ for their thesis.

The ‘Skill Highway’ constitutes the central vertical axis of the skill circle. It runs from study/self-management skills via research skills to team/project management skills. ‘We can know others only by knowing ourselves, but we can know ourselves only by knowing others’ (Whetten et al, 2000: 79). The challenge of mastering these skills is that they have a somewhat complicated process dimension – lying in between input and output. Research and analytical skills are the core competency of anybody following an academic training. These skills are the *prerequisite* necessary for giving reliable advice, but also constitute the basis for effective self-management and team-management. Mastering research skills has individual as well as social ingredients. It first implies that you are able to learn from your own experience. Any learning experience commences with *personal awareness* (self-management) and is followed by a number of learning phases: from relatively incompetent (but blessed in their ignorance of that incompetence) to often agonising periods of awareness of incompetence to a phase of awareness of competence (Figure 2).

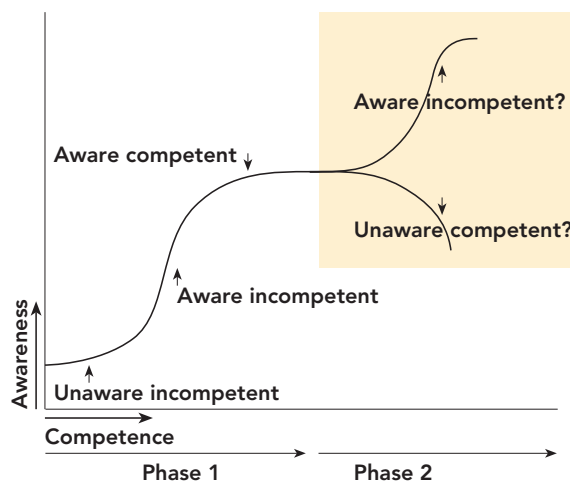


Figure 2 The Learning Cycle

Then you enter a new phase (2) and begin a new cycle of learning new competencies. In learning psychology it is considered that the ultimate stage of the learning cycle is when you reach the stage of being unaware of your competence. This is perhaps important in the event of having to perform complex physical tasks – for instance when driving a car – but is not very functional when you have to engage in the continuous learning process that most managerial and research tasks demand. So the challenge after you for instance have successfully finished a course is to understand that you might have received a sufficient grade, but that it does not mean that you have mastered everything. It is time to move into the so-called ‘discomfort’ zone again, certainly if you want to address a complex issue to which there is no simple answer. Going through the cycle time and again requires a solid research orientation, which will help you throughout the development of any other skill as well.

But research skills only acquire a meaningful and relevant content in a social setting. It is not sufficient for instance to study literature intelligently and contemplate solutions for problems. You should be capable of communicating what you have read and the ideas that you have formed in such a manner, that it has impact on the problem which you want to address. Moreover, the image of the solitary researcher writing his analyses in an ivory tower, away from everyday problems, does not hold any longer in a bargaining society. Research itself is increasingly becoming a group process. Organisations demand that university alumni present facts that can be of practical relevance and are involved in the execution of ideas. Participatory experience in group processes can also give you valuable insight into the interaction of people and organisations. There is always value in participatory observations, as long as you are capable of *systematically* using these insights as *input* for further research.

Input oriented Skills are often the first skills that have to be acquired in academia. First, *reading skills* are the easiest skill to learn. Reading can be done almost everywhere on an individual basis. Reading presents the most effective way of acquiring knowledge accumulated by others, but is also a means of developing a personal approach. Reading represents the highest speed of processing information (much higher than listening for instance). By gaining insight into what others have found or thought, it becomes possible to figure out what you can (or should) add to that, and thus slowly start developing your own approach. Not all relevant information, however, is presented in written form, or the information on paper or on the website is biased. So the second input oriented skill is the ability to obtain information from presentations and by *listening* to others. Effective listening is a social activity that requires that you understand that what you hear is partly the result of your own constructive communication skills. Listening skills are interactive.

Output oriented Skills aim at communicating the results of your research and learning processes. The most effective way is in written form. Writing skills are not

only important for the organisation or person that you do the research for, but also for yourself. The writing process itself gives you the most concrete feedback about your level of understanding of the topic at hand. Famous novelists like George Orwell – but also Stephen King – are known for having stated, ‘I write to find out what I think’. By writing in a scientific manner, your knowledge in any case becomes reproducible. Enabling reproduction (of the test or the research project) is a basic characteristic of any science which strives for the accumulation of relevant knowledge. Committing your research results and ideas to paper creates the best preconditions for getting feedback from others.

The other method of communicating your research results is by oral *presentations*. Presentations are the least effective in making your knowledge reproducible. But it is often a better, and more direct, way of getting instant feedback from your audience (provided they listen). This applies in particular in case you are still in the middle of a learning cycle. In that case, the presentation can enable the formulation of further research questions. A presentation also provides you with information concerning your own understanding of the topic, particularly when your presentation leads to debate and an interaction of opinions. Good presentations are, therefore, always aimed at co-production together with the audience. A bad presentation, on the other hand, at best gives you feedback on your inability to present information, but most of the time does not lead to any meaningful feedback at all (‘questions? no questions!’).

2 The Skill Circle as an integrated whole: creating linkages.

Output-oriented skills (writing and presentation) are a necessary precondition for becoming a skilled person. However, they are never sufficient preconditions. They should have meaningful contents, which is based on input oriented skills such as reading and listening. Dealing with skills effectively means *linking* the various parts of the Skill Circle. Skills can and have to be distinguished, but it is problematic – even foolish – to separate them. Specialised skills training programmes often lack effectiveness when they are devoid of content, good feedback and lack awareness of how they are linked to other skills. If you become aware of this mechanism, the Skill Circle becomes an organic whole and skill development a natural and daily phenomenon. Two types of linkages can thereby be distinguished: horizontal and vertical linkages.

Horizontal linkages. Reading and writing are linked through self-management skills. Listening and presentation are linked through team management skills. By reading intelligently one also accumulates knowledge on how to write. An effective reader, for instance, thinks about the composition of the text read, or considers whether a particular argument is more convincing than another. The next step then is to use this experience as *input* for improving the writing *output*. Good writing, therefore, implies the ability to re-read, (self) manage feedback and consequently re-write texts. Critical writing requires critical reading. A capable reader is often a better writer and, as a result, a better researcher. Writing and reading to a

certain extent draw upon the same cognitive systems in the brain (Berninger et al, 1994). There has to be a balance between the two activities. Too much reading without the other skill activities makes the mind lazy. In the words of Albert Einstein: 'reading after a certain age, diverts the mind too much from its creative pursuits. Any man who reads too much and uses his own brain too little, falls into lazy habits of thinking' (http://www.brainyquote.com/quotes/authors/a/albert_einstein.html, consulted 5 May 2007). Good readers and writers have comparable abilities in effectively organising their personal environment.

The same applies to listening and presentation. Good listening provides input for your own presentation skills. If you attend a lecture and can analyse during the lecture why you like it (for instance because of the structure of the argument or the supportive communication contained in the body language of the speaker) it provides you with input for your own presentation skills. In preparing your own presentation you draw on these other lectures. Skilful presenting, moreover, necessitates the ability to listen. Some managers think that they can learn by talking, but without using any of the other linkages (either reading or listening) this tends to become a rather small and isolated learning path. Some students think that they can learn by passively listening. There has to be a balance between talking/presenting and listening. In case students for instance talk through the presentation of a teacher (on another topic than is lectured about), this in turn discourages the teacher to commit him/herself to the class. By adopting a positive posture and actively intervening in the speech, listeners are able to influence the speaker positively and thus make it more worth their while. Effective presenters and listeners actively shape the social environment that they operated in. The best interpersonal relationships are based on so called 'congruence' between listening and speaking and between verbal and non-verbal communication (Whetten et al, 2000: 238).

Vertical linkages can be established if you are for instance aware that listening and reading have a lot in common in terms of concentration skills. Listening and reading are the skills that you have to master earliest in your studies. They will take up most of your time initially. When you want to know what you are good at, it is important to understand that most people have their strength either in reading or listening – rarely in both (Drucker, 2005). By establishing vertical linkages between the two a higher level of competence can be achieved. An interesting technique in this respect is by reading aloud the text one has written. If you feel uncomfortable with the way the text 'sounds', it is often an indication of a poorly formulated argument. If it sounds intelligible, you might have written something legible.

Table 4 Skill Linkages: Examples

h o r i	Reading and writing	<ul style="list-style-type: none"> • ‘Easy reading is hard writing’ (Ernest Hemingway) • ‘Effective writing requires re-reading time and again’ • ‘Sorry for the long text, I didn’t have time to re-read it and consequently shorten it’
z o n t a l	Listening and presentation	<ul style="list-style-type: none"> • ‘One advantage of talking to yourself is that you know at least somebody’s listening’ (Franklin P. Jones) • ‘Make sure you have finished speaking before your audience has finished listening’ (Dorothy Sarnoff) • ‘Courage is what it takes to stand up and speak; courage is also what it takes to sit down and listen’ (Winston Churchill)
v e r r t	Listening and reading	<ul style="list-style-type: none"> • ‘I learned to write by listening to people talk’ (Gayl Jones) • ‘Effective PowerPoint presentations require a good balance between listening and reading what is projected’ • ‘The reading of all good books is like conversation with the finest men of past centuries’ (Descartes)
i c a l	Presentation and writing	<ul style="list-style-type: none"> • ‘Before one starts talking, others should be able to read off one’s face what is going to be told to them’ (Marcus Aurelius) • ‘Bad presenters stick to their written text’ • ‘I present my writing to receive direct feedback from people that otherwise would not have taken the time to read the whole text’ • ‘Our thoughts are half-formed and unexamined when they’re still inside our heads. Through talking about them, writing them down, debating them, teaching them (...) we work out our beliefs and ideas and make them better’ (Ephilosopher.com, consulted 13/9/2005)

3 Skill Development as Managing Circular Cycles

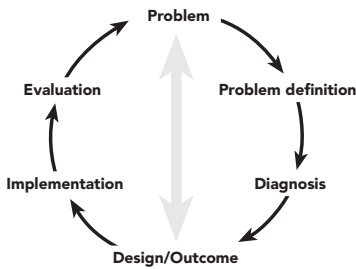
Research skills are the undisputed ‘linking pin’ of all other skills (Figure 1). The learning cycle of research can also be portrayed as a ‘reflective’ circle or cycle (Figure 3). Going through the circle in the right order is vital to the learning process; from problem, via problem definition, diagnosis to the design of a possible solution. Only then you can implement solutions and evaluate them. This can be dubbed the ‘virtuous circle’ of research. In every research project – no matter how small it is – you go through the reflective cycle; sometimes more than once. The idea of the reflective cycle closely resembles the famous learning cycle of David Kolb (1976). Kolb developed his learning cycle as a sequence that moves from concrete experience, reflective observations, via abstract conceptualisations, towards active experimentation and testing. Whetten et al (2000) further specified Kolb’s learning styles into four basic questions that need to be asked in the right sequence and follow a comparable logic as the reflective cycle of research: (1) Why? (problem definition), (2) What? (diagnosis and design), (3) How? (implementation) and (4) If? (evaluation and next problem). Kolb comes to the conclusion that successful managers or administrators are not so much distinguished by any single set of knowl-

edge or skills, but by the ability to ‘adapt to and master the changing demands of his job and career – by his ability to learn’ (Kolb, 1976:21). Linking Kolb’s ideas to the reflective cycle of research specifies the skill highway: good research is a matter of adequate management and self-management skills.

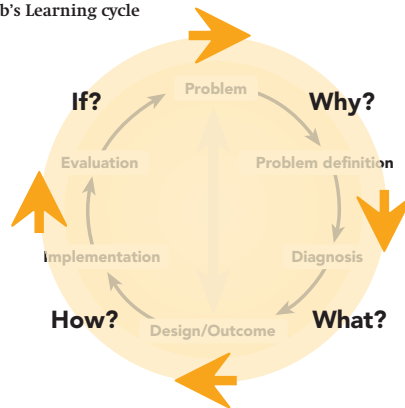
People in the bargaining society are strongly inclined to go through the reflective circle in a different order. For instance, as a guru you are only interested in providing ‘solutions’ – catchy concepts, quick scans, simple methods – which do not always clearly relate to the problems at hand. You run the risk of the ‘consultancy disease’ which is also phrased as: if you have only a hammer at your disposal, you define every problem as a nail. A comparable problem appears in the so-called ‘neurotic spiral’ (cf. Fensterheim, Baer, 1975). People adopt self-doubts because they take inadequate action. If they only analyse this by benchmarking and evaluating against the action of others, the change is imminent that they developed seriously disturbed feelings, heighten their self-doubts and thus engage in further inade-

Virtuous Circles/Cycles

The reflective circle of research

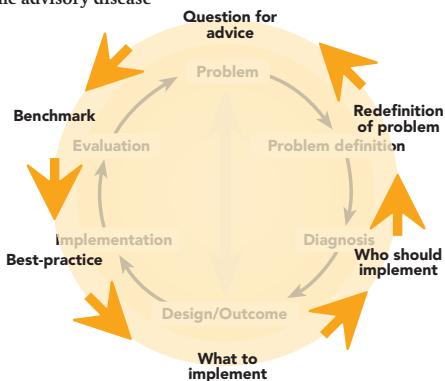


Kolb's Learning cycle



Vicious Circles/Cycles

The advisory disease



The neurotic spiral



Figure 3 Virtuous and Vicious circles of research and learning

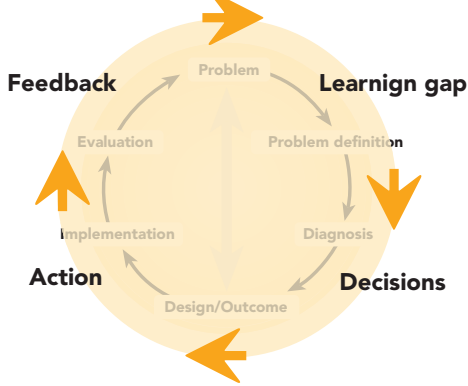
quate action. Going through the reflective cycle the wrong ('left') way can actually trap you in a 'vicious circle'. It contributes to many of the societal problems that have been analysed in section 1. 'The more tolerant people are of novelty, complexity and insolubility, the more likely they are to succeed as managers in information-rich, ambiguous environments.' (Whetten et al, 2000: 71) Tolerance of novelty implies going through the reflective circle the 'right' way.

Mastering all other skills progressively along the skill circle displays a comparable (reflective) sequence. Figure 4 shows the related circles for each of the six skills. The figure also shows the ambition level of the present approach for each Skill and the way to obtain this:

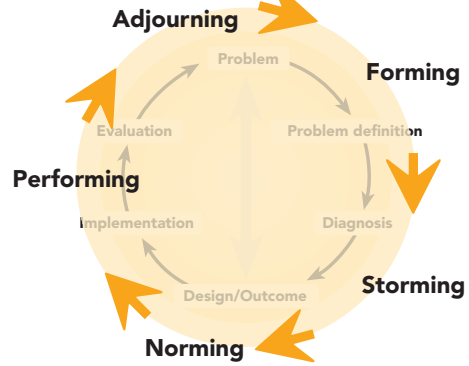
- **Lifelong learning** through effectively self-managing your own study and learning processes – the process through which you change yourself and your capabilities (Parker with Stone, 2003). This is also known as 'generative' or 'double loop' learning. Generative learners are concerned with learning how to learn. It requires the following sequence: (1) that you are always aware of your 'learning gaps' (the difference between where you are and where you want to be and the ability to question old models of learning), (2) make decisions on the basis of different perspectives, (3) translate that into action, and (4) organise solid feedback (either by yourself or through your peers) on a more or less continuous basis.
- **Effective team and project management** through (1) forming: the appropriate team, (2) norming: taking adequate time for brainstorming over possible dimensions (causes as well as consequences) of the project, (3) norming: deciding on the basis of more or less objective 'norms', (4) performing: implement it, after which (5) the team can be adjourned, provided they performed well.
- **Active reading** always (1) first requires the choice for the most appropriate source (no brainless reading of everything that is available) that can be linked to the issue at hand; (2) after which you come to a selection of what you want to know, which is aided by (3) your identification of structures and argumentation in the read material. Active reading is always accompanied by (4) writing at the same time, either as notes or directly as input for the paper you write (never read only to read), after which you (5) evaluate the useability of what you have read and come to the choice of further sources.
- **Constructive listening** is part of constructive communication techniques in general. It starts with (1) deciding whether a meeting is necessary (i.e. whether there are no other instruments that can be used to establish the communication), (2) good preparation of the content and (3) organisation of the meeting. The actual listening effort should be aimed at (4) co-production of what is communicated, otherwise the meeting will be much less effective. This requires for instance so-called 'supportive listening', which shows that you are aware of the effect of your listening attitude on the person(s) you communicate with. After the actual meeting (6) digesting and evaluating the information in an effective and appropriate manner is as important as getting the actual information.
- **Writing with Power** (Elbow, 1981) implies that your writings are aimed to have an effect on the reader. It requires a state of mind and the application of a num-

The Skill Highway

Self-managed-lif-long-learning

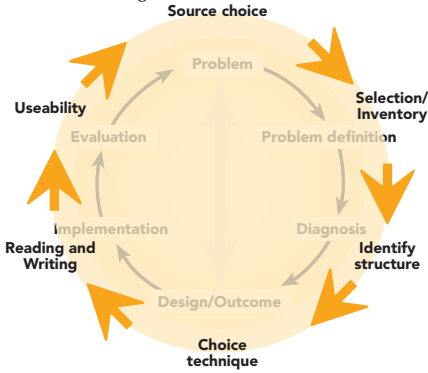


Effective teams and project management

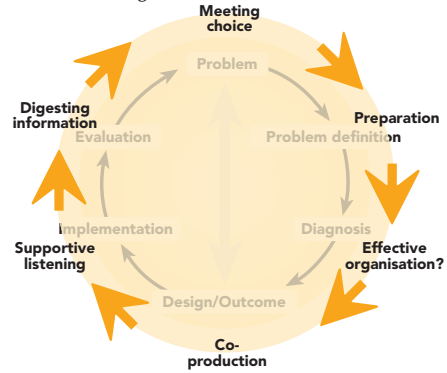


Input Skills

Active reading

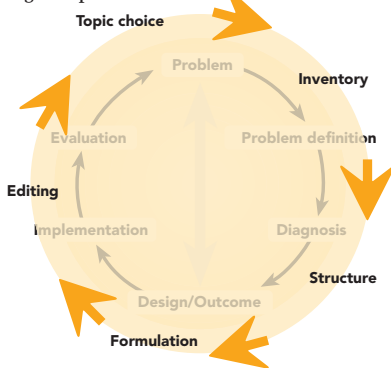


Constructive listening



Output Skills

Writing with power



Constructive listening

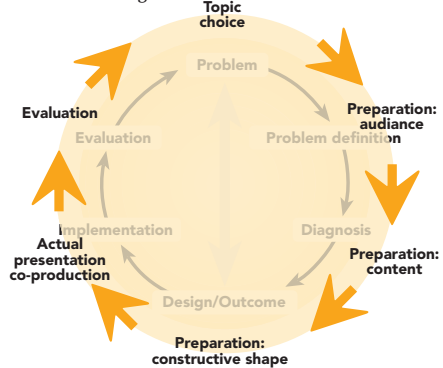


Figure 4 Skills as Reflective Cycles

ber of organisational principles that also apply to effective project management: after your topic choice, first (1) come to an inventory of what you have prepared; start brainstorming over possible lines of argument; (2) then decide upon a clear structure (norming); (3) start formulating completely from scratch your arguments (performing); (4) after which you take sufficient time to edit the text written. Each of these phases takes approximately the same time. Only then can your writings become powerful – no matter how much or how little time you have available. The same rules apply for writing a joint paper. With group papers the danger of engaging in a vicious cycle looms much larger than with individual papers.

- **Effective presentations** also apply the rules of constructive communication. In this case, however, you are more responsible for creating the right preconditions for communication. It requires that you not only (1) choose a topic but (2) try to figure out who your audience exactly is and what the circumstances are under which you make your presentation. This is vital (3) for the type of content you prepare and the (4) constructive shape (informal, graphical, formal, discussion) in which you design your presentation. The actual presentation (5) than can become an act of co-production, after which (6) you always organise solid feedback on the effectiveness of your presentation. Only then can you confidently move to the next presentation.

Weakest links. In the bargaining society, people not only tend to go through these reflective cycles the other way round, but they also tend to undervalue two stages in the cycle: the problem definition and the evaluation stage. The problem definition or brainstorming stage is one of the most underrated stages of activities. If not organised appropriately the remainder of the process lacks depth and creativity. Effective brainstorming is the basis for all creativity. Not brainstorming often implies that you do not even become aware of old habits, and start up a very handicapped learning loop.

Many projects are not evaluated – or only marginally evaluated – for sometimes opportunistic and defensive reasons. Project organisers fear criticism, certainly when the evaluation triggers more critical negotiations over new projects. In case major projects do get evaluated, it is often already because of the perception of a problem. The formation of such evaluation commissions is always part of a complex bargaining process. The same sometimes applies to calculating teachers who do not engage themselves in evaluating their teaching out of fear for generating criticism. Not evaluating, however, means that you get stuck in old habits and unfinished learning loops.

4 Goals of the Skill Sheets collection

The Skill Sheets collection has been designed as a practical tool to help students work through the skill circle and linking the various skills at ever higher levels of mastery and sophistication. Once you have understood the basic logic of this approach, you will find it hard to stop learning! None of the skills is solely ‘product’ or ‘process’ oriented. Sometimes the skills are easy to develop and master, but more

often they require intensive training over longer periods of time. They always have to be linked to real research and content, otherwise you will only learn a number of ‘tricks’ without substance. The Skill Sheets are designed to support tutors and students in this training process. The Skill Sheets collection aims at five results.

- 1 **Quick reference guide.** Firstly, the Skill Sheets should be used whenever a question arises with regards to a particular skill. The research practitioner should be able to find reminders, pointers, tips and general criteria on these skills ‘at a glance’ and should not have to go through whole libraries of information. In less than five minutes every relevant question should be answered by the information in the Skill Sheets. For this reason a detailed index has been included. If you have more time available, a system of references in the text (indicated by an arrow and the number, for instance: →A6) points at other relevant Skill Sheets. If you have even more time available, or in case you need more detailed guidance, you can consult the website (www.skillsheets.com) for many more references, exercises and related tools.
- 2 **Selective.** Secondly, the collection has selected those skills that are considered to be of prime importance for students and researchers. In this Skill Sheet collection, very basic instrumental skills such as data processing skills or detailed knowledge of statistical techniques have more or less been taken for granted. Specialized skills training often lack effectiveness when they are devoid of content, good feedback and lack awareness of how they are linked to other skills.
- 3 **Identification of Skill levels.** Thirdly, the collection presents various *levels* of Skill requirements throughout the studies. Everybody goes through the reflective cycles time and again, and hopefully at ever higher levels of sophistication. Table 5 portrays a number of generalisations on this path per separate skill. These characteristics account for the learning experience of the ‘average’ student.

Table 5 Learning Cycles in Skill Development

	From...	To...
A Research	The questions of others; own experience	Your own questions; other people’s experience
B Study	Learning to digest knowledge; teacher/tutor-oriented; fragmented	Knowledge to generate further learning; assertive/self-oriented; integrated
C Reading	Reproducing; memorizing for exam	Gathering; input for research
D Listening	Passive; consumption; teacher-oriented	Active and interactive; co-production; research-oriented
E Writing	Simple; process-oriented	Advanced/sophisticated; content-oriented
F Presentation	Based on your own experience; aimed at knowledge transfer	Based on your research; co-producing knowledge
G Team management	Simple; directive; assignment and input-oriented	Sophisticated; reflective; project output-oriented

You all move from relatively simple, passive, and reproduction or consumption-oriented skills toward far more (inter)active, complex and production-oriented skills. These processes are intimately related to your research skills. Academic research skills for instance develop from addressing questions of others on the basis of your personal experience, to addressing your own questions on the basis of other people's experience; and from subjective towards objective or inter-subjective knowledge accumulation. Study skills develop from a fragmented and teacher-oriented digestion of pre-arranged knowledge towards a more assertive attitude that aims at life-long learning in the knowledge society.

In the introduction to every series of Skills four levels of skill proficiency will be specified:

- **Level 1:** Entry level Bachelors
- **Level 2:** Exit level Bachelors
- **Level 3:** Exit level Masters
- **Level 4:** Postgraduate level

These specifications will help you to identify where you are in your skill development trajectory. On the website (www.skillsheets.com) further checklists will be published with which you can assess your strengths and weaknesses on a much more detailed level. Secondly, some of these checklists have already been filled out by previous generations of students. The average patterns of their assessments per level will be revealed on the website. It provides an excellent benchmark for an individual assessment of the skills profile that you are likely to attain in the next phase of your studies. Even in your first year, you can start comparing yourself with your peers. This benchmark provides you a starting point for – call it – a “bargaining session” with yourself over the kind of goals and priorities you should/could adopt per skill. It also enables you to ask for advice from your peers or staff members on whether your particular skills profile – for instance in case it really deviates from the average – should be cause for alarm or for comfort. Treat these ‘bargaining benchmarks’ as a guideline, a challenge or source of inspiration, never as an objective measure!

- 4 Systematic and integrative.** Fourthly, this collection helps the student-user to work towards acquiring these skills *systematically*, during their time at university. Some of the skills referred to in this collection may already be included in the programmes offered by the university, others may not. The result of making most skill requirements *clear* is that students *themselves* will be able to systematically assess in which areas they need extra training or where they should organise feedback. In the series on self-management and study skills, some supporting sheets for this goal have been added. While some of the skills appear to be quite basic and self-evident in practice this rarely proves to be the case. .
- 5 Tutor orientation.** Lastly, the Skill Sheet series should enable *tutors* to refer to specific sheets when they make comments and suggestions. This is particularly useful with regard to the lack of time available for practice and sufficient feedback in individual research, speech and writing skills at many universities. Using the Skill Sheets as a basis of focused feedback should allow teachers to use

their time effectively, as they do not have to waste time by continually repeating the same information.

Skill Mottos

- Everyone can acquire a minimum mastery of all relevant Skills. It is a matter of attitude.
- You are as strong as the weakest Skill in the Skill Circle and as the weakest link in the Reflective cycle.
- 'A person is not shaped by the skills (s)he has, but by the choices (s)he makes on the basis of these skills' (cf. Boers, Lingsma, 2003).
- Skills can't be taught, but they can be learned.
- Practice, practice, practice? No, the impact of quality always prevails over quantity.